

Application/Control Number: 90/009,155
Art Unit: 2628

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electronic message and Scannell discloses the message could be transmitted as electronic message for the purpose of lowering transmission cost.

As per claim 37, Allen demonstrated all the elements as disclosed in claim 30.

Allen discloses a method of processing electronic message. It is note that Allen does not explicitly disclose **the attributes include at least one of a source's address, a do not call request, a request for service, a reference to a foreign country, a long message, a reference to a specific product, a reference to multiple questions, and a reference to a specific employee**. However, this is known in the art as taught by Scannell. Scannell discloses "If the matching so far has been successful, then the subject and body fields 30 and 31 are matched against the keyphrases field 40, under the control of the keyphrase zone-limit field 41. The keyphrases field may contain a number of keyphrases which are treated as character strings for matching purposes. The keywords may be combined in logical combinations in the keyphrases. The comparator 52 first matches individual keywords, and then evaluates the logical combinations to determine whether the keyphrase is satisfied." (col. 7, lines 56-66; e.g., keyphrases in subject and body fields 30 and 31 of message are used to determine action performed on message, as users can configure rules, the keyphrases could include a phone number, a foreign address, etc.).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Scannell into Allen because Allen discloses the use of rules to classify or manipulate received and stored cases (Allen, col. 7, lines 24-45) and Scannell discloses

the message classification and prioritization method for the purpose of improving accessibility and searchability of stored cases (Scannell, col. 6, line 64- col. 8, line 19).

As per claim 47, Allen demonstrated all the elements as disclosed in claim 45.

Allen discloses a method of processing electronic message. It is noted that Allen does not explicitly disclose **prioritizing the sub-categorized electronic message into at least one of a plurality of priorities based on the subject matter content of the electronic message wherein a higher priority indicates that the human operator should process the associated electronic message before processing lower prioritized electronic messages**. However, this is known in the art as taught by Scannell. Scannell discloses "the user can set up a number of rules. Each rule tests whether the messages satisfy certain conditions regarding who the sender is, who the addresses and/or copy-tos are and their numbers, and the nature of the subject and a definable initial part of the message. **If a rule is satisfied, then the actions which result can be assigning a priority level to the message, filing it in one or more selected files, and forwarding it to further addresses.**" (col. 6, lines 9-17).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Scannell into Allen because Allen discloses a method of processing electronic message and Scannell discloses the message could be prioritized for the purpose of processing the more important message first.

As per claim 48, Allen and Scannell demonstrated all the elements as disclosed in claim 47, and Scannell further discloses **the plurality of priorities of a product service sub-category include at least one of (i) fraud and lost products; (ii)**

sensitive information; (iii) general information; and (iv) user comments (col. 6, line 18- col. 7, line 27 where the subfield could be considered at least sensitive information or general information).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Scannell into Allen because Allen discloses a method of processing electronic message and Scannell discloses the message could be prioritized for the purpose of processing the more important message first..

As per claim 49, Allen and Scannell demonstrated all the elements as disclosed in claim 48, and Scannell further discloses **the listed priorities are in order from highest to lowest priority** (The sub-units or fields of action part 35B of the rule storage unit 35 are as follows: a priority field 45. **if the message matches the rule conditions, then it is given the priority level set by this field, which can have a value of say between 1 (highest priority) and 5 (low priority)**. A file-to field 46. This contains a list of folders in the user's main folder store 15. If the message matches the appropriate rule conditions, then it is filed in the appropriate folders", col. 6, line 63- col. 7, line 5).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Scannell into Allen because Allen discloses a method of processing electronic message and Scannell discloses the message could be prioritized for the purpose of processing the more important message first.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. as applied to claim 1 above, and further in view of Porter (US 4,829,576).

As per claim 18, Allen demonstrated all the elements as disclosed in claim 1, and further discloses the steps of:

(a1) receiving the electronic message from the source in a first data format

("In the automated help desk application 601, the user 119 may comprise a customer service representative 602, who may typically be receiving a telephone call 603 from a customer 604. A set of customer problems 605 and advice to respond with may be stored as cases 105. Attributes 301 of the cases 105 may include features of the customer problems 604," (col. 9, 7-13) wherein the telephone call is a first format.)

Allen discloses a method of processing electronic message. It is noted that Allen does not explicitly disclose **(a2) converting the electronic message from the first data format to an electronic message having a second data format**. However, this is known in the art as taught by Porter. Porter discloses a method of processing message in which data is converted into a second format ("Then step 310 runs the speech recognition of FIG. 3. When it does this, it passes the BESTWORD choice associated with each utterance to a word processor program for insertion in a body of text at a CURSOR, such as the CURSOR 312 shown in FIG. 12." (col. 6, line 25-30))

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Porter into Allen because Allen discloses a method of processing messages and Porter further discloses the messages could be converted into a second format for the purpose of easy storage.

As per claim 19, Allen and Porter demonstrated all the elements as disclosed in claim 18, and Allen further discloses **the first data format is one of a printed**

document format, a voice data format, a dual tone multi-frequency (DTMF) format, and a first digital data format ("In the automated help desk application 601, the user 119 may comprise a customer service representative 602, who may typically be receiving a **telephone call** 603 from a customer 604. A set of customer problems 605 and advice to respond with may be stored as cases 105. Attributes 301 of the cases 105 may include features of the customer problems 604." (col. 9, 7-13)).

As per claim 20, Allen and Porter demonstrated all the elements as disclosed in claim 19, and Porter further discloses **the second data format is a second digital data format** ("Then step 310 runs the speech recognition of FIG. 3. When it does this, it passes the BESTWORD choice associated with each utterance to a word processor program for insertion in a body of text at a CURSOR, such as the CURSOR 312 shown in FIG. 12." (col. 6, line 25-30) The best match text is inserted.)

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Porter into Allen because Allen discloses a method of processing messages and Porter further discloses the messages could be converted into a second format for the purpose of easy storage.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen and Porter, and further in view of Iglehart (EP 0 586 954 A2).

As per claim 21, Allen and Porter demonstrated all the elements as disclosed in claim 20.

Allen and Porter disclose a method of processing and converting electronic message. It is noted that Allen and Porter do not explicitly disclose wherein **the first**

and second digital data formats are ASCII. However, this is known in the art as taught by Iglehart. Iglehart discloses a messaging system in which "The voice-to-text processing system, converts a voice message from a digitized voice message signal into an ASCII text message signal which is stored in the file server" (Abstract).

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Iglehart into Allen and Porter because Allen and Porter disclose a method of processing messages and Iglehart further discloses the messages could be represented in ASCII format for the purpose of easy transmission and storage.

Claims 32 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. (US 5,581,664).

As per claim 32, Allen demonstrated all the elements as disclosed in claim 31.

It is noted that Allen does not explicitly disclose **the match weight has an absolute value greater than zero and the mismatch weight is zero**, however, since Allen teaches assigning weights to represent match quality, it would have been obvious to one of ordinary skill to assign a range of number, including zero, for the purpose of representing degree match or mismatch.

As for claim 65, Allen demonstrated all the elements as disclosed in claim 64, and since the claim limitation is similar to claim 32, it is similarly rejected as claim 32.

Confirmed Subject Matter

The patentability of claims 5, 9, 10, 14, 33, 46, 50, 51, 56-61 and 66 are confirmed.

As for claims 5, 46 and 56, which are dependent on claims 4, 45 and 55, respectively, Allen, Scannell or any of the remaining requester cited prior art does not explicitly disclose **the sub-categories include product service subject matter and product sales subject matter.**

Allen discloses "Each case 105 may comprise a set of attributes 301, each of which has a value 302. Attributes 301 and values 302 are typically manipulated as an attribute-value pair 303. In a preferred embodiment, attributes may be particular to the application field, and values 302 may have data types which vary from one attribute 301 to another. For example, in a case-based reasoning system 101 for loan approval, each case 105 might have an attribute 301 such as 'loan amount' which would have a numeric value 302, an attribute 301 such as 'approved' which would have a boolean value 302, and an attribute 301 such as 'payment history' which would have a value 302 which is a list or array structure." (col. 4, lines 31-44).

Scannell discloses "Broadly, the user can set up a number of rules. Each rule tests whether the messages satisfy certain conditions regarding who the sender is, who the addresses and/or copy-tos are and their numbers, and the nature of the subject and a definable initial part of the message. If a rule is satisfied, then the actions which result can be assigning a priority level to the message, filing it in one or more selected files, and forwarding it to further addresses." (col. 6, lines 9-17)

However, neither Allen nor Scannell's teaching could be considered the sub-categories include **product service subject matter and product sales subject matter.**

As for claims 9 and 50, which are dependent on claims 6 and 47, respectively, Allen, Scannell or any of the remaining requester cited prior art does not explicitly disclose the plurality of priorities of a product sales sub-category include promotional content, request for services, and general questions and lengthy messages.

Allen discloses "Each case 105 may comprise a set of attributes 301, each of which has a value 302. Attributes 301 and values 302 are typically manipulated as an attribute-value pair 303. In a preferred embodiment, attributes may be particular to the application field, and values 302 may have data types which vary from one attribute 301 to another. For example, in a case-based reasoning system 101 for loan approval, each case 105 might have an attribute 301 such as '**loan amount**' which would have a numeric value 302, an attribute 301 such as '**approved**' which would have a boolean value 302, and an attribute 301 such as '**payment history**' which would have a value 302 which is a list or array structure." (Allen, col. 4, lines 31-44).

Scannell discloses "The sub-units or fields of action part 35B of the rule storage unit 35 are as follows: a priority field 45. if the message matches the rule conditions, then it is given the priority level set by this field, which can have a value of say between 1 (highest priority) and 5 (lower priority). A file-to field 46. This contains a list of folders

in the user's main folder store 15. If the message matches the appropriate rule conditions, then it is filed in the appropriate folders. A forward-to field 47. This contains a list of addresses; if the message matches the rule conditions, then it is forwarded to these addresses." (Scannell, col. 6, line 63 to col. 7, line 7).

Scannell further discloses "The invention in its broad form resides in method and mail system of the type wherein a plurality of electronic mail messages are directed to a user at a terminal, and wherein the plurality of incoming mail messages is held in store in a main folder till accessed by the user for reading and action, the invention including a message control system to non-manually and automatically prioritize the plurality of messages selectively at any predetermined time of day, based on and using user created and stored files so that messages of relatively higher priority are sooner presented to the user or dealt with appropriately as desired, as priority messages, regardless of any chronological order in which messages were received for the user..." (col. 2, lines 49-62).

Neither Allen nor Scannell discloses giving messages priority levels responsive to messages matching rule condition, messages are differently prioritized based on user-defined criteria, which could include: **promotional content, request for services, and general questions and lengthy messages.**

Claims 10 and 51, which depend on claims 9 and 50 respectively, are therefrom confirmed.

As for claim 14, which is dependent on claim 13, Allen, Scannell or any of the remaining requester cited prior art does not explicitly disclose **the classification step indicates that the electronic message requires a second level of assistance from a human operator when at least one of a phone number, a foreign address, a do not call request, a facsimile number, a specific employee request, sensitive information, and a specific manual procedure is interpreted in the electronic message.**

Allen discloses "Cases 105 which are hits may be noted in a match table 314. The cases 105 in the match table 314 may be evaluated for a match quality 315, and the match quality 315 for each case 105 may be recorded in the match table 314. In a preferred embodiment, the inference engine 111 may determine match quality 315 for each case 105 in the match table 314 by a weighted sum of an evaluation 316 of those attribute-value pairs 303 which are matched. In a preferred embodiment, the weights assigned to each attribute-value pair 303 may be predetermined and may be altered by the user 119." (Allen, col. 5, 15-26).

Allen additionally discloses "Each case 105 may comprise a set of attributes 301, each of which has a value 302. Attributes 301 and values 302 are typically manipulated as an attribute-value pair 303. In a preferred embodiment, attributes may be particular to the application field, and values 302 may have data types which vary from one attribute 301 to another. For example, in a case-based reasoning system 101 for loan approval, each case 105 might have an attribute 301 such as 'loan amount' which would have a numeric value 302, an attribute 301 such as 'approved' which would have

a boolean value 302, and an attribute 301 such as 'payment history' which would have a value 302 which is a list or array structure." (Allen, col. 4, lines 31-44).

Scannell discloses "Broadly, the user can set up a number of rules. Each rule tests whether the messages satisfy certain conditions regarding who the sender is, who the addresses and/or copy-tos are and their numbers, and the nature of the subject and a definable initial part of the message. **If a rule is satisfied, then the actions which result can be assigning a priority level to the message, filing it in one or more selected files, and forwarding it to further addresses.**" (Scannell, col. 6, lines 9-17). Scannell further discloses "If the matching so far has been successful, then the subject and body fields 30 and 31 are matched against the keyphrases field 40, under the control of the keyphrase zone-limit field 41. The keyphrases field may contain a number of keyphrases which are treated as character strings for matching purposes. The keywords may be combined in logical combinations in the keyphrases. The comparator 52 first matches individual keywords, and then evaluates the logical combinations to determine whether the keyphrase is satisfied." (Scannell, col. 7, lines 56-66).

However, neither Allen nor Scannell explicitly discloses **the electronic message requires a second level of assistance from a human operator when at least one of a phone number, a foreign address, a do not call request, sensitive information, and a specific manual procedure is interpreted in the electronic message.**

As per claims 33 and 66, which are dependent on claims 31 and 64, respectively, Allen or any of the remaining requester cited prior art does not explicitly disclose **each**

score is normalized by dividing the score by a maximum possible score for the stored case model, where the maximum possible score is determined when all of the attributes and text of the case model and the stored case model match.

Allen discloses that "Cases 105 which are hits may be noted in a match table 314. The cases 105 in the match table 314 may be evaluated for a match quality 315, and the match quality 315 for each case 105 may be recorded in the match table 314. In a preferred embodiment, the inference engine 111 may determine match quality 315 for each case 105 in the match table 314 by a weighted sum of an evaluation 316 of those attribute-value pairs 303 which are matched. In a preferred embodiment, the weights assigned to each attribute-value pair 303 may be predetermined and may be altered by the user 119." (Allen, col. 5, lines 15-26).

However, Allen does not disclose **each score is normalized by dividing the score by a maximum possible score for the stored case model, where the maximum possible score is determined when all of the attributes and text of the case model and stored case model match.**

As for claims 57-61, since they are dependent on confirmed claim 56, they are also confirmed.

Remarks

In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be

submitted in response to this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37 CFR 1.116, after final rejection and 37 CFR 41.33 after appeal, which will be strictly enforced.

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a), to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 6,411,947 throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in ex parte reexamination proceedings are provided for in 37 CFR 1.550(c).

Conclusion

All correspondence relating to this ex parte reexamination proceeding should be directed:

By EFS: Registered users may submit via the electronic filing system EFS-Web, at <http://sportal.uspto.gov/authenticate/authenticateuserlocalepf.html>

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For EFS-Web transmissions, 37 CFR 1.8(a)(1)(i) (C) and (ii) states that correspondence (except for a request for reexamination and a corrected or replacement request for reexamination) will be considered timely filed if (a) it is transmitted via the Office's electronic filing system in accordance with 37 CFR 1.6(a)(4), and (b) includes a certificate of transmission for each piece of correspondence stating the date of transmission, which is prior to the expiration of the set period of time in the Office action.

Any inquiry concerning this communication or earlier communications from the Reexamination Legal Advisor or Examiner, or as to the status of this proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Signed:

/Ryan R Yang/
Primary Examiner, Art Unit 3992

Conferees:

